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EXAMINER

KIM, JENNIFER M

ART UNIT

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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.



## **DETAILED ACTION**

The amendment July 5, 2011 filed have been received and entered into the application.

### ***Claim Rejections - 35 USC § 103***

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claims 1 and 3-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Raghunathan (U.S. Patent No. 4,517,179) in view of McCarty (U.S. Patent No. 5,776,504) and further in view of American Hospital Formulary Service Drug Information 88 (AHFS88).

Raghunathan teaches that Applicant's active agent, metolazone is an antihypertensive agent (column 1 lines 24-28).

Raghunathan does not teach the employment of metolazone for the treatment of pre-eclampsia, effective amounts set forth in claims 1, 7, and 11, and dosing frequency set forth in the claims.

McCarthy teaches that standard treatment for pre-eclampsia consists of antihypertensive drugs (column 2 lines 9-15).

AHFS88 teaches that for the management of edema metolazone can be administered 5-10mg once a day. This amount range encompasses Applicant's

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dosages set forth in claims 1, 7 and 11. AHFS88 teaches that metolazone has been administered every other day after the response of the patient was stabilized. AHFS88 teaches that Microx® (metolazone) is recommended initial adult dosage for mild to moderate hypertension is 0.5mg once daily, usually in the morning and may increase to 1mg once a day (under dosage and administration page1445).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to employ metolazone for the treatment of pre-eclampsia within the therapeutic dosages taught by AHFS88 because Raghunathan teaches that metolazone is an antihypertensive agent that is a standard treatment of pre-eclampsia in view of McCarthy and because AHFS88 teaches the therapeutic dosage range of metolazone for the treatment of hypertension as well as edema. One would have been motivated to make such a modification in order to achieve an expected benefit of metolazone having antihypertensive effect that is useful in the treatment of pre-eclampsia. There is a reasonable expectation of successfully treating pre-eclampsia with metolazone with the therapeutic dosages disclosed by AHFS88 because antihypertensive such as metolazone is a standard treatment that is used in the treatment of pre-eclampsia in view of McCarthy.

The amounts of active agents to be used, the dosing frequency (e.g., repeating treatment periodically or every 24 hours are taught by AHFS88), pharmaceutical formulations, mode of administration, flavors, surfactant are all deemed obvious since they are all within the knowledge of the skilled pharmacologist and represent conventional formulations and modes of administration.

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Further, the mechanism of action of treatment without adversely affecting the fetus and treatment without substantial volume reduction in intravascular extracellular fluid is obviously an unavoidable effect upon the administration of the same active agent with overlapping dosages in the treatment of pre-eclampsia.

For these reasons the claimed subject matter is deemed to fail to patentably distinguish over the state of the art as represented by the cited references. The claims are therefore properly rejected under 35 U.S.C. 103.

None of the claims are allowed.

### **Response to Arguments**

Applicant's arguments filed July 5, 2011 have been fully considered but they are not persuasive. Applicant essentially argues that the Applicant's claimed dosages are less than a diuretic dose of metolazone. This is not persuasive because the dosages recited in claims 1, 7 and 11 are the dosages that are well known for the treatment of edema and hypertension in view of AHFS88. AHFS88 teaches that metolazone in the amount 5-10mg is the effective amount for exhibiting antihypertensive effect as well as antidiuretic effect for the treatment of edema. Moreover, AHFS88 teaches lower dosage of 0.5mg can be employed to achieve antihypertensive effect. Applicant argues that considering the combination of Raghunathan and McCarthy, they are directed to two different problems cannot be combined without significant destruction of the individual teaching. This is not persuasive because it is clearly known in the art in view of McCarthy that the antihypertensive drugs are the standard treatment for pre-

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eclampsia while Raghunathan and AHFS88 teaches that metolazone is an antihypertensive agent. It would have been *prima facie* obvious to employ metolazone as antihypertensive for the treatment of pre-eclampsia as a standard regimen.

It is suggested that Applicants submit a declaration to clearly establish a surprising and unexpected result using Applicants teaching.

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

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### **Correspondence**

Any inquiry concerning this communication or earlier communications from the examiner should be directed to JENNIFER M. KIM whose telephone number is (571)272-0628. The examiner can normally be reached on Monday through Friday 6:30 am to 3 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Brandon Fetterolf can be reached on 571-272-2919. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/JENNIFER M KIM/  
Primary Examiner, Art Unit 1628

Jmk  
August 1, 2011